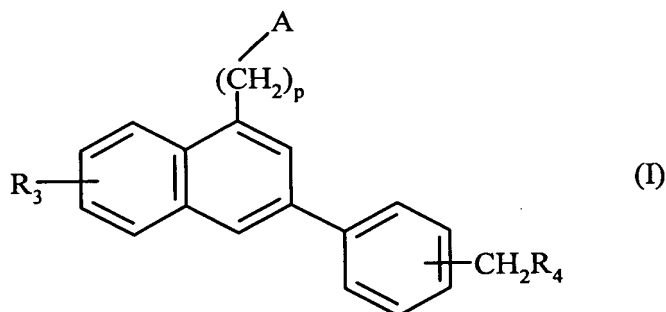
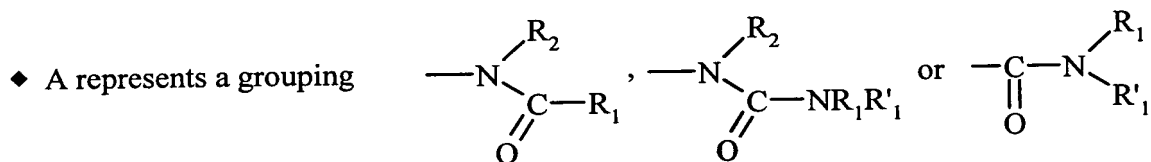


## CLAIMS

**1-** Compounds of formula (I) :



wherein:



(wherein R<sub>1</sub> and R'<sub>1</sub>, which may be identical or different, each represents a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkyl group, a linear or branched (C<sub>2</sub>-C<sub>6</sub>)alkenyl group, a linear or branched (C<sub>2</sub>-C<sub>6</sub>)alkynyl group, a (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl group, a (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl-(C<sub>1</sub>-C<sub>6</sub>)alkyl group in which the alkyl moiety may be linear or branched, an aryl group, an aryl-(C<sub>1</sub>-C<sub>6</sub>)alkyl group in which the alkyl moiety may be linear or branched, a heteroaryl group or a heteroaryl-(C<sub>1</sub>-C<sub>6</sub>)alkyl group in which the alkyl moiety may be linear or branched,

and R<sub>2</sub> represents a hydrogen atom or a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkyl group,

it being possible, additionally, for R<sub>1</sub> and R<sub>2</sub> together to form a linear or branched alkylene chain containing from 3 to 6 carbon atoms),

♦ R<sub>3</sub> represents a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkoxy group,

♦ R<sub>4</sub> represents a halogen atom, a hydroxy group, a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkoxy group or an amino group optionally substituted by one or two linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkyl groups,

♦ p is 1, 2 or 3,

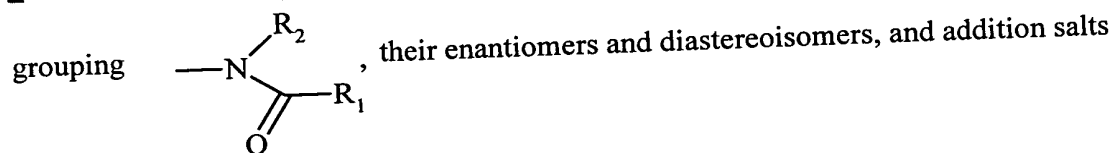
it being understood that:

- "aryl" denotes a phenyl, naphthyl or biphenyl group,
- "heteroaryl" denotes any mono- or bi-cyclic aromatic group containing from 1 to 3 hetero atoms selected from oxygen, sulphur and nitrogen,

5 wherein the aryl and heteroaryl groups so defined may be substituted by from 1 to 3 groups selected from linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkyl, linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkoxy, hydroxy, carboxy, formyl, nitro, cyano, linear or branched polyhalo(C<sub>1</sub>-C<sub>6</sub>)alkyl, alkoxycarbonyl and halogen atoms,

10 their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

2- Compounds of formula (I) according to claim 1, wherein A represents a



thereof with a pharmaceutically acceptable acid or base.

15 3- Compounds of formula (I) according to claim 1, wherein R<sub>1</sub> represents a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkyl group, their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

4- Compounds of formula (I) according to claim 1, wherein R<sub>1</sub> represents a linear or branched (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl group, their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

20 5- Compounds of formula (I) according to claim 1, wherein R<sub>2</sub> represents a hydrogen atom, their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

6- Compounds of formula (I) according to claim 1, wherein p is 2, their enantiomers and

diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

5 7- Compounds of formula (I) according to claim 1, wherein R<sub>3</sub> represents a methoxy group, their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

8- Compounds of formula (I) according to claim 1, wherein R<sub>4</sub> represents an OH group, their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

10 9- Compounds of formula (I) according to claim 1, wherein R<sub>4</sub> represents an OMe group, their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

10- Compounds of formula (I) according to claim 1, wherein R<sub>4</sub> represents an NH<sub>2</sub> group, their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

15 11- Compounds of formula (I) according to claim 1, wherein R<sub>4</sub> represents a halogen atom, their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

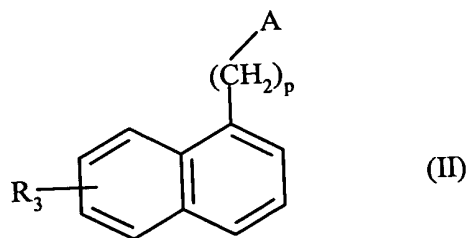
20 12- Compounds of formula (I) according to claim 1, wherein the -CH<sub>2</sub>R<sub>4</sub> group is in the 3 position (meta) on the phenyl group, and addition salts thereof with a pharmaceutically acceptable acid or base.

13- Compound of formula (I) according to claim 1, which is *N*-(2-{3-[3-(hydroxymethyl)phenyl]-7-methoxy-1-naphthyl}ethyl)acetamide, and addition salts thereof with a pharmaceutically acceptable acid or base.

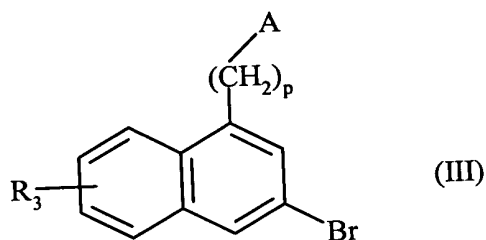
14- Compound of formula (I) according to claim 1, which is *N*-(2-{3-[3-

(aminomethyl)phenyl]-7-methoxy-1-naphthyl}ethyl)acetamide, and addition salts thereof with a pharmaceutically acceptable acid or base.

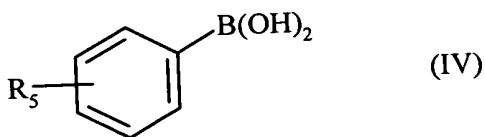
**15-** Process for the preparation of compounds of formula (I) according to claim 1, characterised in that there is used as starting material a compound of formula (II) :



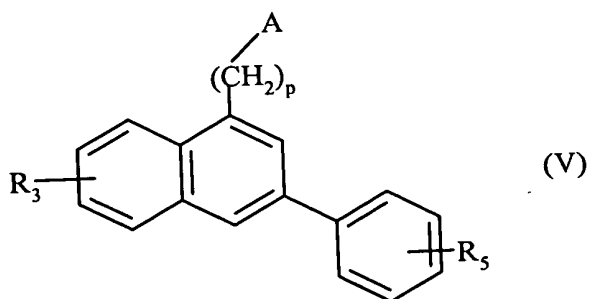
wherein A, p and R<sub>3</sub> are as defined for formula (I), which is subjected to the action of bromine to yield a compound of formula (III) :



wherein A, p and R<sub>3</sub> are as defined hereinabove, which is condensed, in the presence of palladium acetate or tetrakis(triphenylphosphine)palladium, with a compound of formula (IV) :



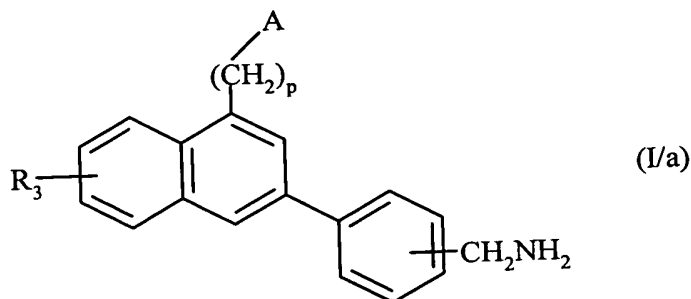
wherein R<sub>5</sub> represents a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl group, a formyl group or a cyano group, to yield a compound of formula (V) :



wherein A, p, R<sub>3</sub> and R<sub>5</sub> are as defined hereinabove,

which compound of formula (V),

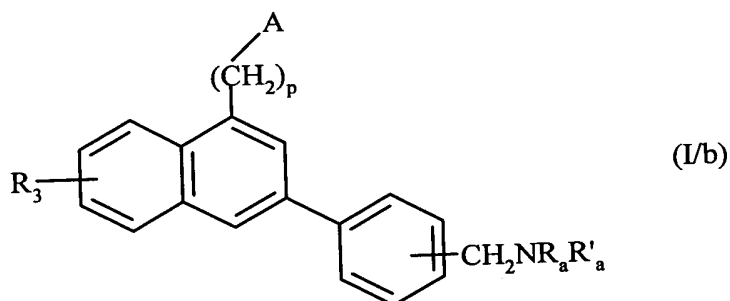
- when  $R_5$  represents a CN group, is subjected to the action of Raney nickel to obtain a compound of formula (I/a), a particular case of the compounds of formula (I) :



5

wherein A, p and  $R_3$  are as defined hereinabove,

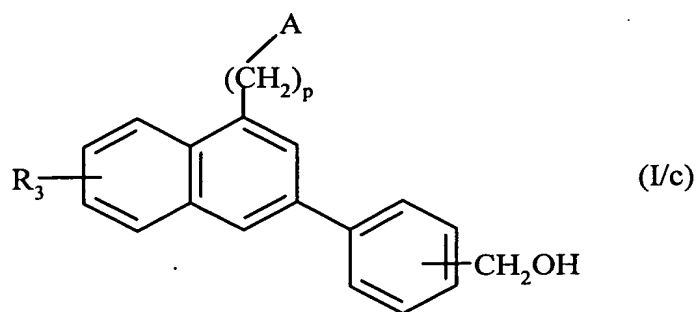
which compound of formula (I/a) may be subjected to the action of one or more alkylating agents to yield a compound of formula (I/b), a particular case of the compounds of formula (I) :



10

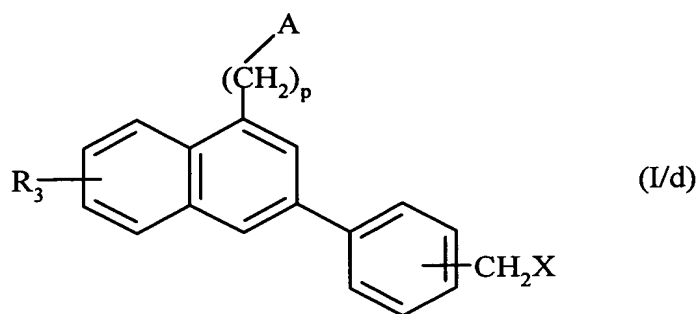
wherein A, p and  $R_3$  are as defined hereinabove,  $R_a$  represents an alkyl group and  $R'_a$  represents a hydrogen atom or an alkyl group,

- when  $R_5$  represents a formyl group, is subjected to the action of  $NaBH_4$  or triethylsilane and, when  $R_5$  represents an alkoxy carbonyl group, is subjected to the action of  $LiAlH_4$ , to yield a compound of formula (I/c), a particular case of the compounds of formula (I) :



wherein A, p and R<sub>3</sub> are as defined hereinabove,

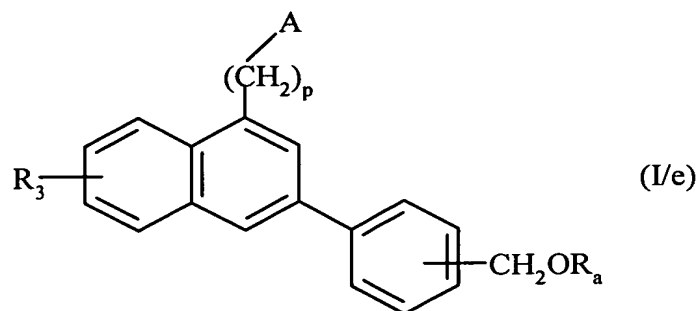
which compound of formula (I/c) is subjected to the action of a hydrohalic acid to yield a compound of formula (I/d), a particular case of the compounds of formula (I) :



5

wherein A, p and R<sub>3</sub> are as defined hereinabove and X represents a halogen atom,

or which compound of formula (I/c) is subjected to the action of an alcoholate to yield a compound of formula (I/e), a particular case of the compounds of formula (I) :



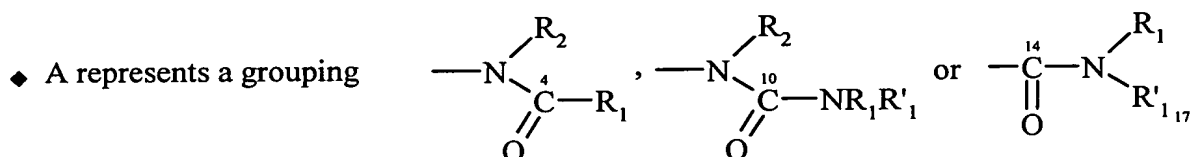
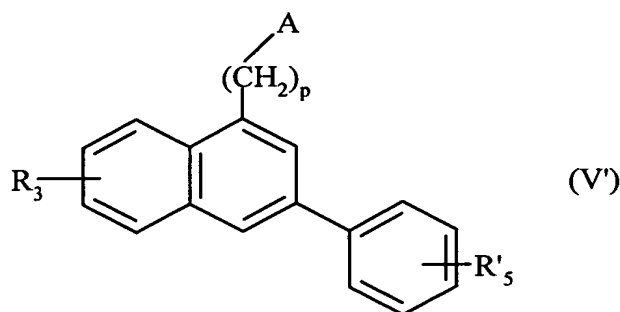
10

wherein A, p, R<sub>3</sub> and R<sub>a</sub> are as defined hereinabove,

the compounds (I/a) to (I/e) constituting the totality of the compounds of formula (I), which compounds may be purified according to a conventional separation technique, are converted, if desired, into addition salts with a pharmaceutically acceptable acid or base, and are optionally separated into their isomers according to a conventional separation

technique.

**16-** Compounds of formula (V') :



(wherein R<sub>1</sub> and R'<sub>1</sub>, which may be identical or different, each represents a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkyl group, a linear or branched (C<sub>2</sub>-C<sub>6</sub>)alkenyl group, a linear or branched (C<sub>2</sub>-C<sub>6</sub>)alkynyl group, a (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl group, a (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl-(C<sub>1</sub>-C<sub>6</sub>)alkyl group in which the alkyl moiety may be linear or branched, an aryl group, an aryl-(C<sub>1</sub>-C<sub>6</sub>)alkyl group in which the alkyl moiety may be linear or branched, a heteroaryl group or a heteroaryl-(C<sub>1</sub>-C<sub>6</sub>)alkyl group in which the alkyl moiety may be linear or branched,

and R<sub>2</sub> represents a hydrogen atom or a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkyl group, it being possible, additionally, for R<sub>1</sub> and R<sub>2</sub> together to form a linear or branched alkylene chain containing from 3 to 6 carbon atoms),

◆ R<sub>3</sub> represents a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkoxy group,

◆ R'<sub>5</sub> represents a linear or branched (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl group or a formyl group, their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base, for use as synthesis intermediates for the preparation of compounds of formula (I) but also as melatonergic receptor ligands.

**17-** Pharmaceutical compositions comprising compounds of formula (I) according to any one of claims 1 to 14 or compounds of formula (V') according to claim 16, or one of their

addition salts with a pharmaceutically acceptable acid or base, in combination with one or more pharmaceutically acceptable excipients.

**18**- Pharmaceutical compositions according to claim 17 for use in the manufacture of medicaments for the treatment of disorders of the melatoninergetic system.

5       **19**- Pharmaceutical compositions according to claim 17 for use in the manufacture of  
medicaments for the treatment of sleep disorders, stress, anxiety, seasonal affective  
disorders or severe depression, cardiovascular pathologies, pathologies of the digestive  
system, insomnia and fatigue due to jetlag, schizophrenia, panic attacks, melancholia,  
appetite disorders, obesity, insomnia, psychotic disorders, epilepsy, diabetes, Parkinson's  
10       disease, senile dementia, various disorders associated with normal or pathological ageing,  
migraine, memory losses, Alzheimer's disease, cerebral circulation disorders, and also  
sexual dysfunctions, and as inhibitors of ovulation, immunomodulators and in the  
treatment of cancers.